



## ***H.E. Davis Construction, Inc.***

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*m/p 23/016*

February 9, 2004

Division of Oil, Gas & Mining  
Attn: D. Wyane Hedberg  
1954 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

Dear Wayne,

The following are responses to the third review of the Amended NOI of the Levan Chicken Creek Mine.

105.1 All Maps have been numbered

See new Reclamation maps II E-1 & II E-2

See new Surface facilities map II D-1 & II D-2

See new Surface facilities map II D-3

See new Surface Facilities Map II D-4

105.3 See new map D-2

The Road on the north side of the canyon will not be addressed at this time. When and if the road is to be improved or used information will be provided to DOGM prior to any activity.

106.5 The soil depth had been modified in a previous revision to 0-40 inches. The typo has been corrected and the soil amount was re-calculated. The soil amount was also labeled as Cubic Yards when it was really figured in tons. The new amounts show correctly the amount in Cubic Yards. See new pages 106.4 & 106.6

107.1 This comment was addressed in a previous revision please see pages IV-1 "posting signs" & "berms and fences".

107.3 See new pages 106.9 and page IV-2

107.4 See new page IV-2 the 110% containment was addressed in an earlier revision on this same page.

**RECEIVED**

**FEB 10 2004**

**DIV. OF OIL, GAS & MINING**



109.1 See new pages VI -1 & VI-2

See new page IV-2

110.2 See new page VII-3

111.2 See new Reclamation map II E-1

111.3 No hauling on the north side (see above)

111.8 All areas have been re-measured and re-calculated. Some confusion has been generated because of the many revisions. This was a comprehensive look at what was involved. All areas are now accounted for and none are double counted.

New side cast amount 2,870 lf

113.0 See new Reclamation Surety Estimate (see note above) in 111.8

Please feel free to contact me if there are any other questions at (801) 802-6913.

Sincerely,

A handwritten signature in black ink, reading "Tony L. Christofferson". The signature is written in a cursive, flowing style.

Tony L. Christofferson  
Property/Environmental Manager  
Clyde Companies – HE Davis Construction



## 106.2 Type of operation to be conducted.

This mining operation will involve the direct surface mining of gypsum deposits. Mineral extraction will be accomplished by drilling and blasting in order to break the rock into sizes that can be handled by a trackhoe or loader. On the West portion of the mine the material will then be loaded into haul trucks by trackhoes or loaders. The haul trucks carry the material from the mine site down to the county road level of the operation to the processing equipment. The material will be placed onto the ground where a loader will pick it up and place it into a jaw crusher. On the East portion of the mine loaders will pick up the material from the mine and deposit it directly into the crusher. After crushing, the material is transferred to a screen plant that sizes the material into fines, 2"- and 6"-. The sized material is placed into stockpiles. From the stockpiles loaders place it into haul trucks, which transport it offsite.

~~Material will be hauled from the East mine site down a private and controlled road on the north side of the canyon. No trucks from the East mine will use the county road for access or hauling.~~ It has not been determined how material from the East mine site will be transported down the canyon. No substantial amounts of material (truckloads) will be removed from the East site until this has been determined. Supplemental information will be submitted prior to the commencement of gypsum removal. Material from the West mine site will continue to exit the canyon on the county road. HE Davis will work with the county on improvements on this portion of the road. HE Davis will also work with the county on a haul road that skirts the Town of Levan in order to minimize the impact to the local residents.

Drilling and blasting is a necessary part of the mining process. HE Davis will follow a blasting protocol which will include a study of the effects of the blasting on the springs that supply the Town of Levan with water.

Some reclamation will happen concurrently with mining operations including final grading as mining proceeds. Topsoil placement will also take place in certain areas as the mining proceeds because some areas will become inaccessible to large equipment.



### 106.3 Estimated acreage

Areas of actual mining:	<u><del>46.75</del> 45.04</u>	
Overburden/waste dumps:		Included in mining area
Ore and product stockpiles:	<u><del>2.35</del> 3.53</u>	
Access/haul roads:	<u><del>7.73</del> 6.24</u>	
Associated on-site processing facilities:	<u>4</u>	
Tailings disposal:	<u>0</u>	
Other – Please describe:	<u>0</u>	
<b>Total Acreage</b>	<u><del>60.83</del> 58.81</u>	



## 106.6 Plan for protecting and re-depositing existing soil

Any soil removal will be done with a trackhoe or dozer. All the soil and any plant matter will be stockpiled together in an area that will be undisturbed by mining activities. The location of this stockpile will be in an area that has already been disturbed by mining immediately below the active mine area or in areas adjacent to the mining. A berm will be built around the base of the stockpile to prevent erosion. The berm will also be situated so that storm water will not erode the pile. The Soil will be seeded at the end of each season with a quick cover of grass and legumes in order to prevent erosion. The seed mix for the quick cover vegetation will be broadcast at a rate of 15 PLS lbs./acre (see below). Soil placement or re-deposition will also be accomplished with the use of a trackhoe or dozer and shall be placed at a depth of ~~six~~ five inches. Because a trackhoe or dozer will be used to place the soil the surface will be left somewhat uneven, however, the uneven surface will be beneficial in preventing erosion. The uneven surface will also help in re-vegetation efforts by holding seeds in depressions higher on slopes and in a more uniform distribution.

Soil that has been removed from roadways and stored on the shoulders of the road will be replaced using a trackhoe. The soil on the sides of the road will also be planted with a quick cover seed mix. The soil should not be contaminated with salts because there will be no Magnesium Chloride use for dust control on the mine roads, it will only be used on the county road ~~and cattleman's road~~. The soil will be placed to match the original slopes and grades as close as possible. This material will be tested for nutrients and if needed, a soil amendment of composted manure at the rate of 10 tons per acre will be added.

Thickness of soil material to be salvaged and stockpiled: 0 – 40 in.

Area from which soil material can be salvaged: ~~60~~ 53.8 acres

Volume of soil to be stockpiled: ~~76,870~~ 27,295cy

Volume of soil already stockpiled: 21,500 cy

Much of the soil that will be used for reclamation of the active mine area has already been removed from the mining area and stockpiled below where the road enters the active mine. The soil that will be used to reclaim the roads is being stored in the shoulder of the road and acts as a berm for water control and a safety barrier. When reclamation is done any extra soil will used to increase the depth of replaced soil from 6" to greater than 6".

### Interim Revegetation cover crop

Intermediate Wheatgrass	Elymus hispidus	7 lbs. pls/acre
Slender Wheatgrass	Elymus trachycaulus	3 lbs. pls/acre
Hard Fescue	Festuca ovina var. duriscula	1 lbs. pls/acre
Cicer Milkvetch	Astragalus cicer	4 lbs. pls/acre



### **106.9 Location and size of ore, waste, etc.**

Ore - All ore mined from the site will be processed and stockpiled on the county road level. Any material on top of the gypsum deposit is assumed to be topsoil and will therefore be collected and saved. The gypsum deposit is massive and considered to be “pure”. Because of the characteristics of the deposit all materials mined will be consumed and no tailings will be generated. The gypsum will not be treated for the purposes of processing. The ore may be sprayed with water as a dust suppressant, however, any discharge from water sprayed onto the material or from rain water would not be considered hazardous.

Overburden - Overburden will be removed with a trackhoe or dozer. This material will include soil and fines, vegetation, and small rock debris. All of which will be stored together in a stockpile in an area that will be undisturbed by mining activities and will later be used as “topsoil”. A berm will be built around the base of the stockpile to prevent erosion. The berm will also be situated so that storm water will not erode the pile. The overburden is thin enough that all that is collected will be used to reclaim the areas that will be exposed as well as those areas that were already exposed at the time H.E. Davis Construction took over the mine.

Soil removed from roadways will be stored on the shoulder of the road. This will be done to control erosion and act as a safety barrier for vehicles.

All the stockpiled soil, including the soil in berms, will be seeded so that a protective covering of vegetation will grow. The vegetation will help prevent erosion as well as add organic matter to the material, which will promote future growth when the material is used for reclamation.

Tailings – No waste in the form of tailings or reject material is expected.

Dumps and ponds – Two small sediment ponds will be constructed on the lower level of the West site. The purpose of the ponds is to settle out the suspended load of any storm water that comes from the mine site and to retain all storm water. The East side mine will be dished at the bottom of the mine to catch any storm water.

Effluent discharge point – None constructed or used.



## **Minimizing Hazards**

Shafts and tunnels – none on site.

Disposal of trash - A small 20' X 20' "boneyard" will be kept on site during the life of the operation. The "boneyard" will be kept near the crusher. All trash will be hauled off site and disposed of properly. No trash or equipment parts, etc. will be buried. A "port-a-potty" will also be used and maintained for all employees.

Capping holes - any exploratory holes that have been drilled will be consumed by the extraction of the gypsum. Drill holes made for blasting purposes will be consumed in the blasting process.

Posting signs - The following signs will be posted in appropriate places:

Danger High Bank

Hard Hat Area

Danger Flammable Liquid

No Trespassing

Blasting warning and ~~procedure~~ protocol signs located on the county road east and west of the mine.

Sign warning of mining and truck traffic in the lower part of the canyon.

Berms and fences – 18" Berms will be used to divert storm water away from disturbed areas to help prevent erosion. A 3' berm will be placed above highwall areas to prevent access. Entrance to the site will be controlled by gates along with the natural vegetation and steepness of the site.

## **Minimizing Damage to Drainage**

Care will be taken to avoid disrupting the natural drainage whenever possible. Any drainage that is impacted will be restored as close to original condition and shape as possible. Wherever drainage is disturbed the new channel will be lined with a good gradation of angular, hard, 6"-24" Rip-Rap installed to engineering guidelines to help prevent erosion. Berms will be used to keep runoff from disturbed areas from flowing directly into the drainage system, thus helping to avoid silting.



### **Minimizing Sediment and Erosion**

Berms will be constructed at the edges of the disturbed areas to control any runoff water. The berms will prevent runoff from the disturbed areas from flowing into the drainage system, thus helping to avoid silting. These berms are intended to contain any and all stormwater that falls onto the disturbed area to within the boundary of the disturbance. The berms will also prevent run-on. The lower pad may have some runoff so 2 (two) small sediment basins will be constructed. The basins will contain 135% of a ten year storm event. Stormwater should not leave the site.

Access Roads into the mines will be graded so that water will flow back into the hillside. The road will have a borrow ditch along the hillside that will convey water to catch basins. The catch basins will be located in low spots along the length of the road and will act as sediment traps. The catch basins will be piped under the road to a small rip-rap basin that will act as an additional trap. The downhill side of the road will have a berm to prevent trucks from going over the hill and to retain water.

All sediment controls for the West mine will be in place by May 15, 2001. All Sediment controls will be inspected by the Gypsum Superintendent on a quarterly basis to ensure that they are in good condition and working properly. They will also be checked after heavy rainstorms to make sure that they are sized and designed appropriately. Records of inspections will kept for a period of two years.

### **Deleterious Material Storage and Handling**

One diesel tanks will be kept on site. The maximum size of the tank will be 12,000 gallons but this may vary from season to season (sometimes being smaller). The average daily inventory will likely be about 10,000 gallons of fuel. The tanks will be kept in a secondary metal containment structure ~~bermed area that is lined with plastic~~ and will contain 110% of the capacity of any tank placed in it. The tank will be placed in an area that should the secondary containment ~~berm~~ be breached any spilled fuel will not enter the stream or drainage channels. A SPCC plan will be developed for this site.

There will also be lube oil stored in 55 gallon drums. The drums will be placed over drip pans when in use. When the drums are empty they will be hauled off site and disposed of properly.

Any small spills of fuel or lube oils will be collected and haul to the Geneva Rock Point of the Mountain facility where the contaminated soil will be burned in the asphalt hot plant. Any large spills will be reported to the Division of Environmental Response and Remediation (DERR) and clean-up efforts will follow their guidelines.

Phone # for DERR 801-536-4100

Emergencies 801-536-4123

### **Soil Salvage**

Any topsoil removal will be done with a trackhoe. All the soil and any plant matter will be stockpiled together in an area that will be undisturbed by mining activities. A berm will be built around the base of the stockpile to prevent erosion. The berm will also be situated so that storm water will not erode the pile.

Soil removed from roadways will be stored on the shoulder of the road. This will be done to control erosion and act as a safety barrier for vehicles.



### 109.1 Surface and groundwater.

Surface water should not be highly impacted by mining activities at this location. Toxins and heavy metals are absent from this type of mining operation and the processing of gypsum. Storm water may pick up some sediment load as it crosses disturbed areas of the site but this will be controlled through the use of berms and sediment basins. These structures will allow the water to drop its load as it evaporates, soaks into the ground or at a couple of points it settles in a sediment basins.

There are a few springs in the area which supply the Town of Levan with drinking water. The springs include the Tunnel Spring, the Rose Bush Spring and the Cobble Spring. In 1999 the flow rate of the springs at the peak of the water season was 180gpm for the Tunnel Spring, 500gpm for the Rose Bush Spring and 160gpm for the Cobble Spring. Over the last five years the flows have dropped to 90gpm for the Tunnel Spring, 250gpm for the Rose Bush Spring and 160gpm for the Cobble Spring. The decline has corresponded with drought conditions that have continued over this same time period. No sudden drops in the flow rate have occurred. Blasting has been used at this mine to enable the removal of gypsum. A seismometer has been used to determine the effect of blasting at the closest spring, but when blasting took place the machine was not disturbed enough to even register the event. Because there appear to be no direct effects on the area of the springs themselves other factors have been considered.

There are three factors that make the blasting unlikely to effect ground water. 1: Distance from the springs. The West site is almost ½ mile from the nearest spring and the East site is a little over ¼ mile ~~and on the opposite side of the river than~~ from its nearest spring. 2: Bedrock. The mining of gypsum is in the bedrock and should not disrupt the flow of water like would occur through, for example, alluvial deposits. In fact, blasting may fracture the rock enough to allow for more infiltration and less runoff, thus enhancing the recharge zone. 3: Soft Rock. Gypsum is a very soft mineral, defining hardness #2 of the Moh's hardness scale. Because the rock is so soft it will absorb much more of the downward energy from a blast than would other common rock types. The springs will also be monitored to ensure no changes have occurred due to blasting.

Another control of the blasting process that will be employed is the amount of explosive that is used to loosen the rock. It is not the intent of the blasting crew to blow the material off the mountain, only to fracture it enough to enable the material to be removed while leaving access and working areas clear and accessible. (see monitoring)

The water system used by the city should not be impacted ~~in any way~~. The only "problem" area is where the pipes from the upper springs comes close to the surface in the road at one point. This part of the road will no longer be used by haul trucks.

All deleterious material will have secondary containment in the form of plastic lined berms or drip pans. This will help prevent potential contaminants from getting onto the ground in the first place. If the ground is contaminated with a deleterious material the contaminated ground will be removed and transported off-site where it will be disposed of legally and properly. Secondary containment of fuel tanks with additional berms and grade control will help to ensure that water supplies are not affected in the event of a catastrophic failure.

The mine is located on bedrock therefore groundwater would not be effected by activities at this mine site.



## **Blasting Protocol**

### Maximum limits of blasting

Hole size:	4"
Hole spacing:	7' on center
Pattern:	Chevron
Hole depth:	40'
Number of holes:	70
Load:	2 – 50lbs bags of Prell
Ignited with primer cord with millisecond delays back to front	
Some small shots may use ½ stick TNT for ignition	

1. Signs will be placed east (up canyon) and west (down canyon) of the mine site notifying the public when blasting is to take place in the area.
2. When blasting is to take place all traffic will be stopped and held until the “all clear” is given.
3. The mine area will also be cleared of all people and checked to make sure that no one is in the mine site.
4. When the blast is to take place a warning signal will be sounded.
5. Blasting will take place.
6. The area will be checked for any unsafe conditions.
7. When the blast has cleared an “all clear” signal will be sounded and traffic will be allowed to resume in the canyon.

All safety precautions will be observed while drilling, loading and wiring the holes. Blasting will also be engineered to ensure controlled blasts that are not “oversized”.

## **Monitoring**

### Water

The Town of Levan has a water system located at the bottom of the canyon, including springs, a collection and distribution system. HE Davis will work with the town to install flow meters on the springs that are closest to the mining operations. The Flow Meter readings will be recorded daily so that any variation can be detected.

### Shock Waves

Whenever a blast is conducted at this operation a seismograph will be placed near the closest spring to monitor the effects of the blast. When blasting is conducted in the West pit an additional seismograph will be placed in town at a residence close to the canyon. This will help determine the effects of the blast.



## **110.2 Reclamation of roads, highwalls, slopes, etc.**

### Reclamation of roads

Soil that has been removed from roadways and stored on the shoulders of the road will be replaced using a trackhoe. The soil will be placed to match the original slopes and grades as close as possible. The soil will be tested for nutrients and a soil amendment of composted manure will be added if necessary. Roadway areas will then be seeded with a DOGM approved seed mix

### Reclamation of highwalls

A variance will be requested so that highwalls may be left as the final grade for parts of this mine. A report from AGEC will be included with this NOI that details the stability of the slopes that are proposed for this mine. The recommendations listed in that report will be followed including setbacks of the slope face and processes used to mine the material. The benches of the highwalls will be prepared as outlined in section 106.6 and then covered with 6" of soil and then hand broadcast seeded. The area will be raked to help cover the seeds.

### Reclamation of slopes

Slopes will be graded in such a way as to tie mined areas back into existing slopes. Roadways will also be graded to match the pre-mining slopes from which they were cut. All slopes will be covered with at least 6" of soil and then seeded.

### Impoundments, pits and ponds to be left

The ponds and water control structures that are not associated with the county road or the cattleman's road will be backfilled and graded to blend in with their surroundings. The area will be prepared and seeded as outlined in section 106.6.

### Reclamation of impoundments, pits and ponds

There will be a two small detention basins built to collect runoff from the stockpile and processing site of the west site. The basins will be used to hold runoff water and to act as a sediment trap. The basins have been designed to hold 135 % of a 10-year storm event. The East basin will be about 525 square feet, 4 feet deep and will have a capacity of about 77 cy. The West basin will have a capacity of at least 80 cy and will handle runoff from the West entrance road and from the county road in this area. The basins will be reclaimed at the end of operations.

Note : see copy of engineering calculations.



#### Reclamation of drainage

Minimal damage will be done to any drainage system. The most impact will be on the lower level, of the West site, where a pad has been constructed for the processing and storage of material. The drainage area for spring runoff and storm events has been shifted to the east but the grade has been relatively unchanged. This drainage will be reclaimed at the end of operations. The drainage channel will be lined with a good gradation of angular, hard, 6"-24" Rip-Rap installed to engineering guidelines to prevent erosion.

#### Reclamation of Waste Dumps

No waste material will be generated therefore no reclamation of dumps will need to be completed.

#### Reclamation of shafts and adits

There are no shafts or adits on the property currently and none will be constructed therefore none will remain when mining is complete.

#### Reclamation of drill holes

All drill holes will be consumed in the mining process and none will remain when mining is complete.

#### Reclamation of tailings

No tailings will be generated therefore none will remain when mining is complete.

#### Reclamation of leak pads

No leak pads will be constructed therefore none will remain when mining is complete.

#### Describe the disposition of any stockpiles remaining

No stockpiles will remain when mining is complete.

#### Reclamation of benches and quarry floors

These surfaces will be fractured through blasting and ripping. Any excess overburden will be placed here to increase the depth of cover. Topsoil will then be placed on the benches using a trackhoe and seeding will take place as mining proceeds. The quarry floors will be sloped, covered with topsoil and seeded at the conclusion of operations.



## **110.5 Re-vegetation, topsoil and planting.**

### **a) Soil Material Replacement**

Soil placement or re-deposition will be accomplished with the use of a trackhoe or dozer and shall be placed at a depth of five inches. Because a trackhoe or dozer will be used to place the soil the surface will be left somewhat uneven, however, the uneven surface will be beneficial in preventing erosion. The uneven surface will also help in re-vegetation efforts by holding seeds in depressions higher on slopes and in a more uniform distribution.

### **b) Seed Bed Preparation**

Seedbed preparation will be accomplished as soil is replaced over the mined areas and as roads are closed. Soil placement or re-deposition will be accomplished with the use of a trackhoe and shall be placed at a depth of five inches. The ground will ~~not~~ be scarified prior to soil re-deposition as much as possible on the mine floors and will be scarified to a depth of two feet in all other areas such as haul roads. The ground will already be broken up to some degree because of the blasting that will be performed in order to break the rock out of the deposit. The soil that is replaced will be placed in a manner that will not compact the material and will leave the surface uneven. The soil may be placed in heaps rather than an even layer of 6", this will help to provide adequate soil depth for root development. Any material from the mine area that can be used as a subsoil will be used to increase the depth of cover including but not limited to any extra fines that may not be sold at the end of mining operations.

To increase the % OM in the soils an application of 10 ton/acre of composted manure will be placed on top of the soil. The manure will be incorporated into the soil either by manual or mechanical means. Care will be given to not compact the soil prior to seeding.



# Reclamation Surety Estimate

H.E. Davis Construction, Inc.

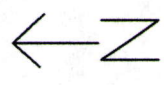
Levan Gypsum - Steele

M/023/016 - Juab County

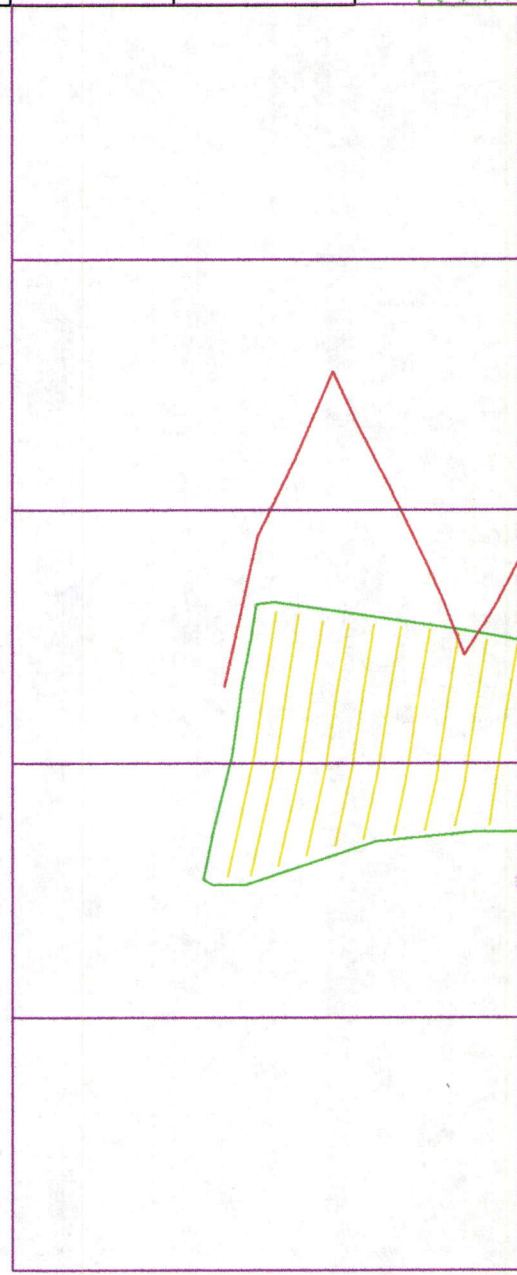
Activity	Quantity	Units	\$/Unit	\$	Cost	\$
safety gates, signs etc	6	ea	200			600
demolition of buildings/facilities	0	cf	0.24			0
debris & equipment-trucking	2	trips	50			100
debris & equipment-dump fees	20	ton	55	—		1,100
debris & equipment-loader	2	hours	166			332
debris & equipment-labor	4	hours	15			60
regrading facilities area	5	acre	364	—		1,820
regrading stockpile slopes	19,300	cy	0.36	—		6,948
ripping dump tops	4	acre	271	—		1,084
ripping stockpile & compacted	6	acre	271	—		1,626
ripping pit floors	45.04	acre	271	—		12,206
ripping pit access roads	6.24	acre	271	—		1,691
creating safety barriers-highwall	2,870	lf	0.12			344
ripping access roads	6.24	acre	271			1,691
regrading access roads	6.24	acre	364			2,271
sidecast material replacement	12,370	lf	1.09			13,483
surface drainage-restore	200	lf	2			400
retention pond	2	ea	200			400
topsoil -dozer/trackhoe	31,717	cy	0.36			11,418
topsoil -truck	17,078	cy	2.6			44,403
composted manure	58.81	acre	300			17,643
broadcast seeding	8.5	acre	170			1,445
hydroseeding	50.3	acre	800			40,240
general site cleanup	50	acre	50			2,500
equipment mobilization	4	equipment	2000			8,000
supervision	30	days	386			11,580
Sub Total						183,385
10% contingency						18,338
escalator for 5y @ 2.89%/year						29,149
<b>Total</b>						<b>230,872</b>



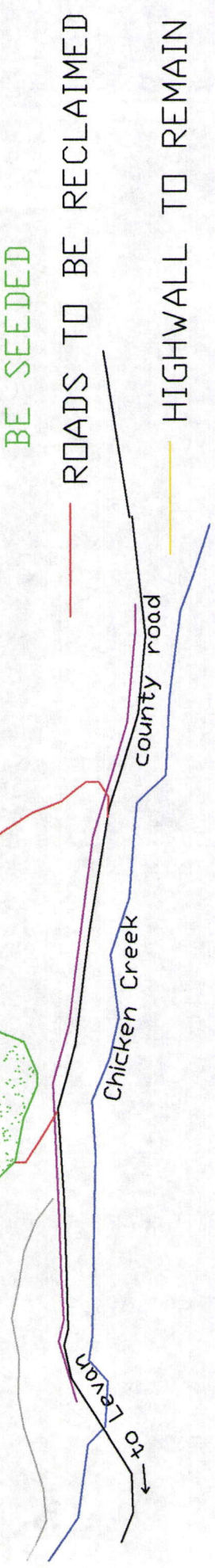
# H.E. DAVIS LEVAN CHICKEN CREEK (East) scale 1" = 500'



RECLAMATION MAP of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
Areas to be Reclaimed	DRG. # II E-2
Drawn By: Tony Christofferson	Date: 2/8/04



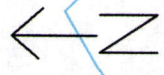
PROPOSED AREAS  
 OF RECLAMATION  
 AREA WILL RECEIVE  
 5" OF SOIL AND THEN  
 BE SEEDED



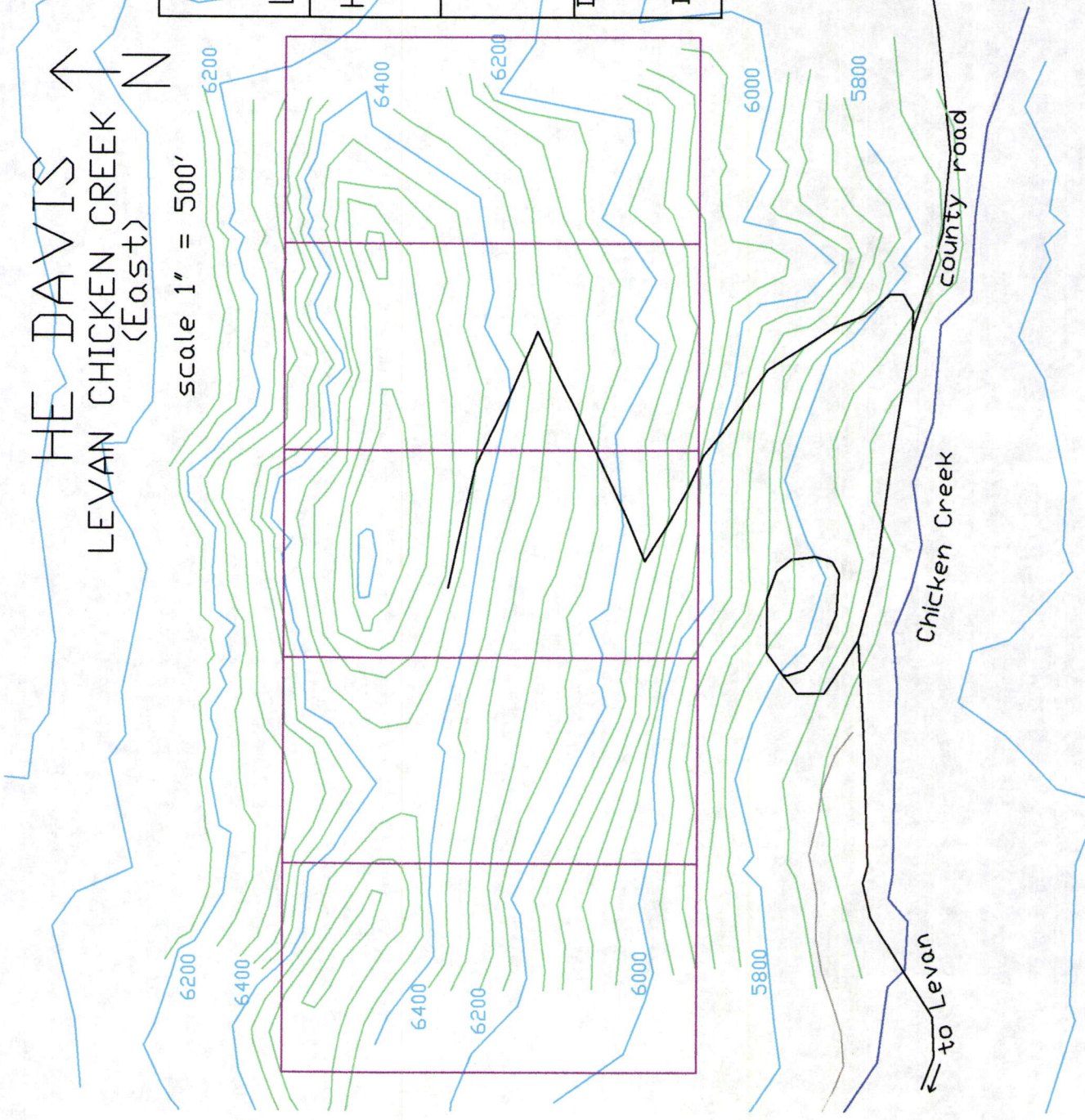


HE DAVIS  
LEVAN CHICKEN CREEK  
(East)

scale 1" = 500'

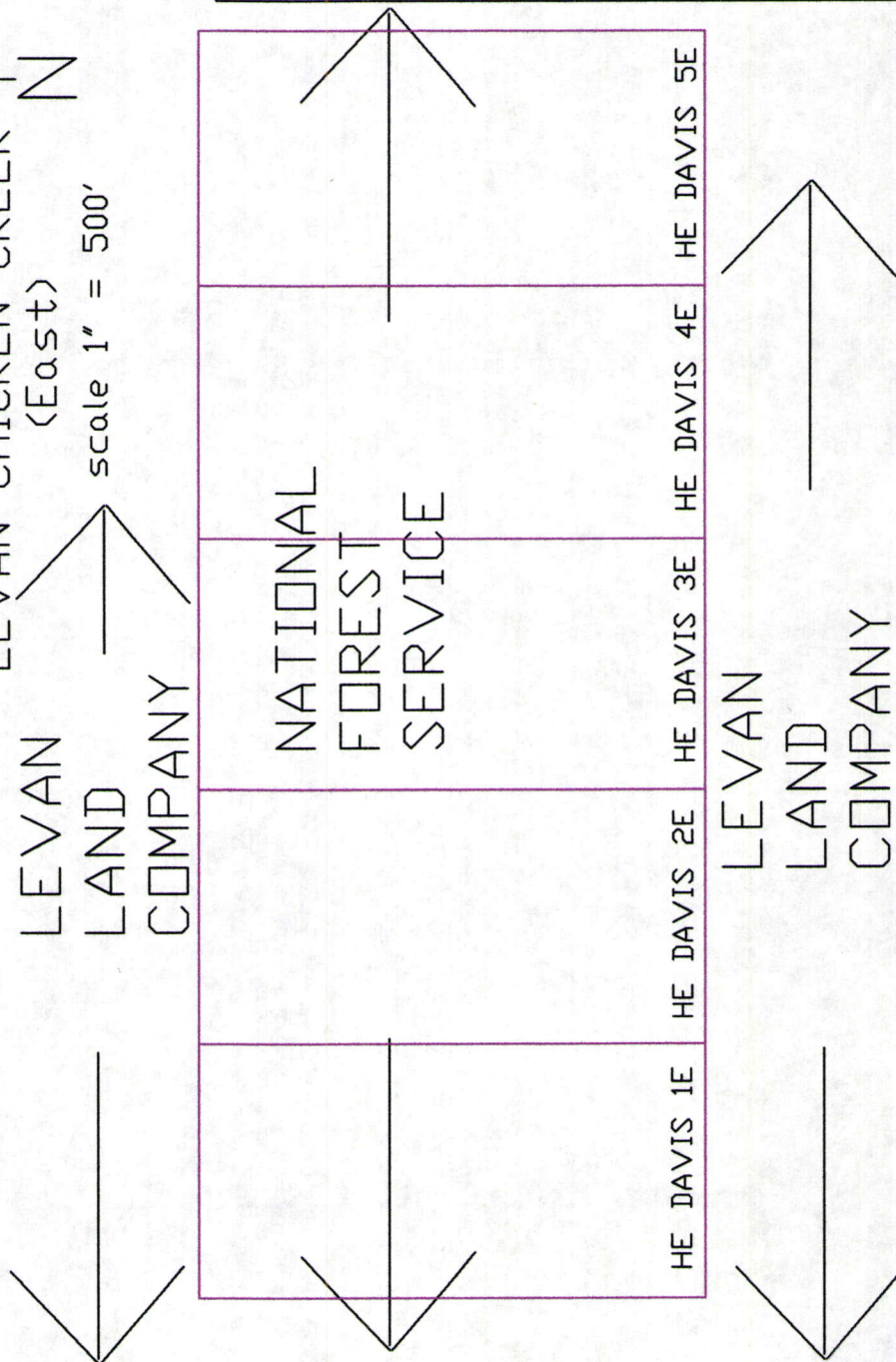


BASE MAP of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
contour interval - 40 feet	
Drawn By: Tony Christofferson	DRG. # II B-2
Date: 4/14/03	





HE DAVIS  
LEVAN CHICKEN CREEK  
(East)  
scale 1" = 500'



to Levan  
county road

OWNERSHIP MAP of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
OWNERSHIP	
Drawn By: Tony Christofferson	DRG. # II C-2
Date: 4/14/03	



# HE DAVIS LEVAN CHICKEN CREEK (East)

scale 1" = 500'

SOILS MAP  
 of  
 LEVAN CHICKEN CREEK  
 HE DAVIS CONSTRUCTION  
 SPANISH FORK, UTAH

Information Source:  
 Soil Survey of Fairview-Nephi  
 Area, Utah, USDA, National  
 Resources Conservation Service.

Drawn By:  
 Tony Christofferson

DRG. #  
 III C-2

Date:  
 4/14/03



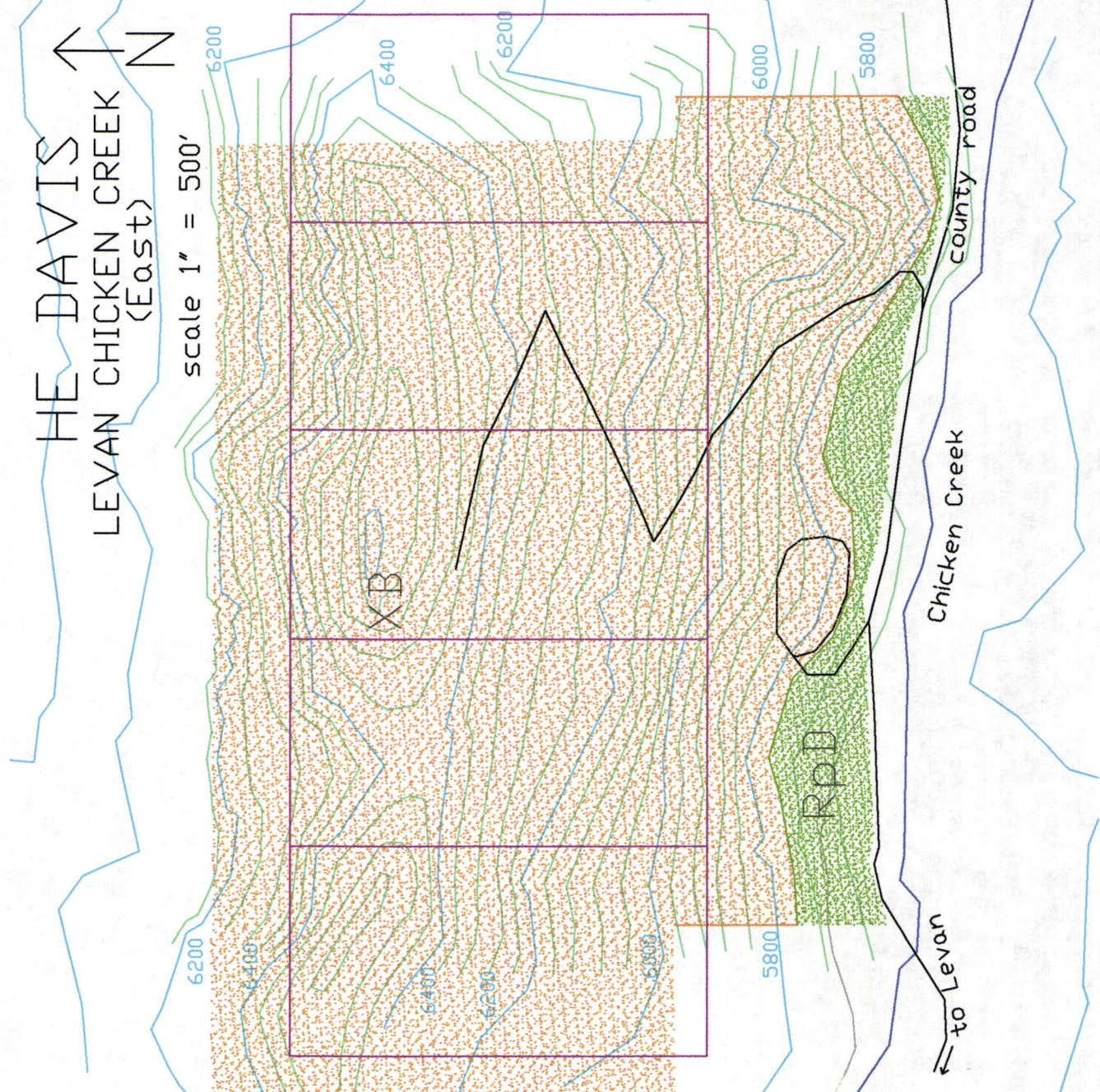
Rpd-

Rofis Gravelly Clay  
 Loam, 4 to 15% Slopes.



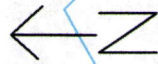
Xb-

Xeric Torriorthents-  
 Rock Outcrop Complex,  
 Steep.





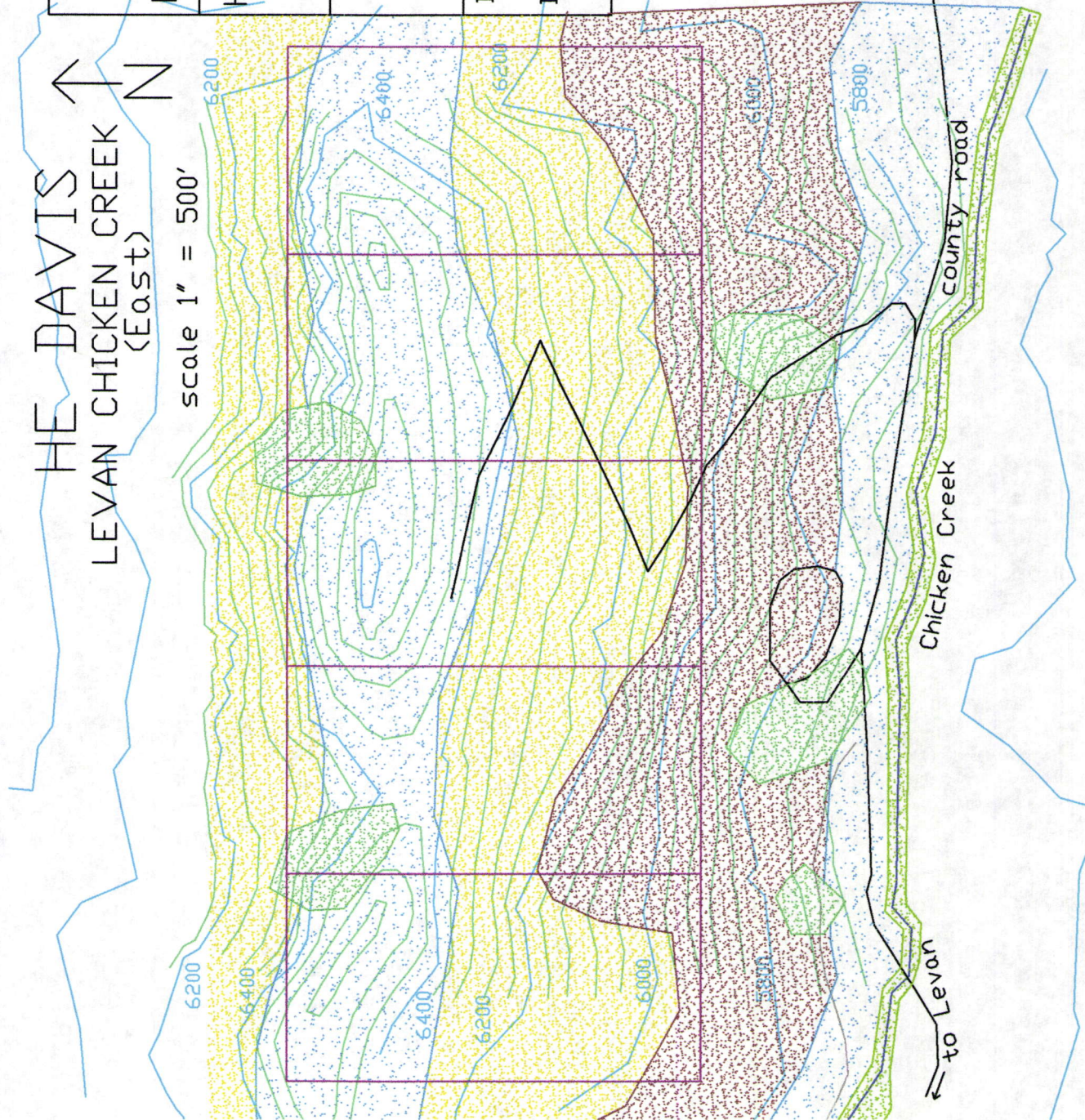
# HE DAVIS LEVAN CHICKEN CREEK (East)



scale 1" = 500'

VEGETATION MAP of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
Vegetation	
Drawn By: Tony Christofferson Date: 9/30/02	DRG. # III D-2

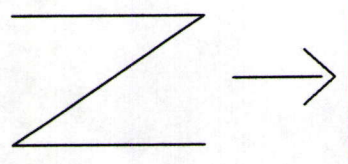
- Riparian
- Slender Wheatgras / Mountain Mahogany
- Pinyon-Juniper
- Mountain Mahogany
- Gambel's Oak





# THE DAVIS LEVAN CHICKEN CREEK (West)

Scale 1" = 100'

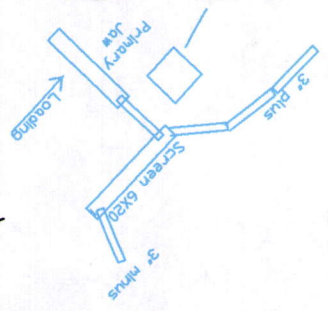


SURFACE FACILITIES of MAP	
LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
EXISTING FACILITIES	
Drawn By: Tony Christofferson	DRG. # II D-1
Date: 4/14/03	

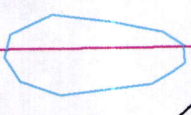
Detention  
Pond



Boneyard



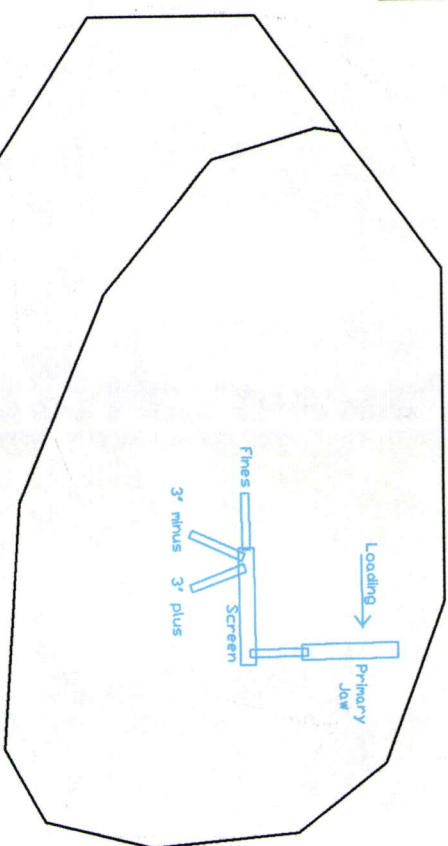
Detention  
Pond





# CRUSHER SETUP

HE DAVIS  
LEVAN CHICKEN CREEK  
(East)  
scale 1" = 100'



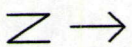
SURFACE FACILITIES MAP of	
LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
EXISTING FACILITIES	
Drawn By: Tony Christofferson	DRG. # II D-2
Date: 2/8/04	

Chicken Creek



SURFACE FACILITIES MAP of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
EXISTING FACILITIES Levan Town System Culinary Water	
Drawn By Tony Christofferson	DRG. # 11 D-2
Date: 10/14/03	

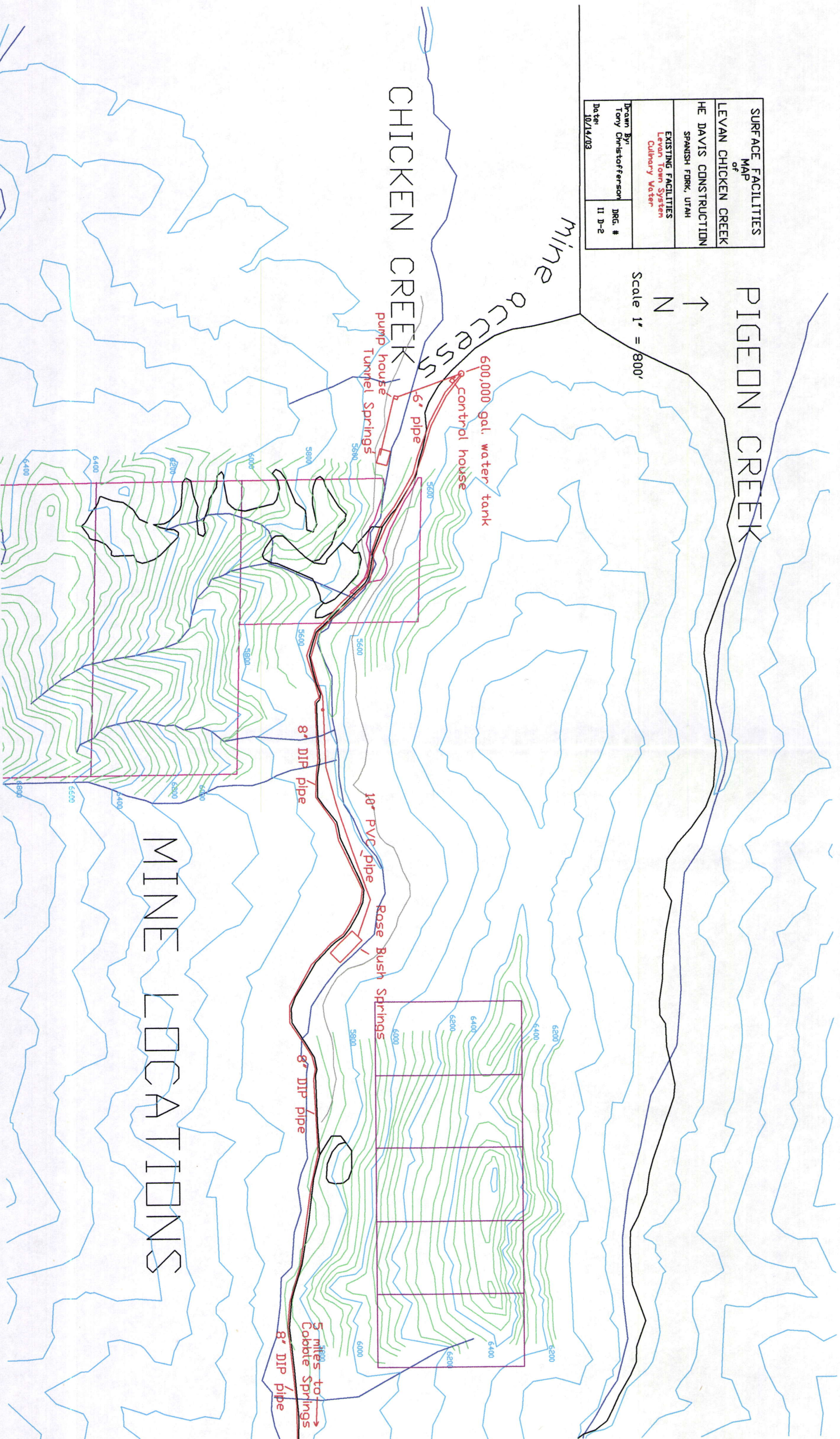
PIGEON CREEK



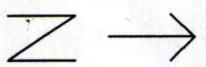
Scale 1" = 800'

mine access

CHICKEN CREEK



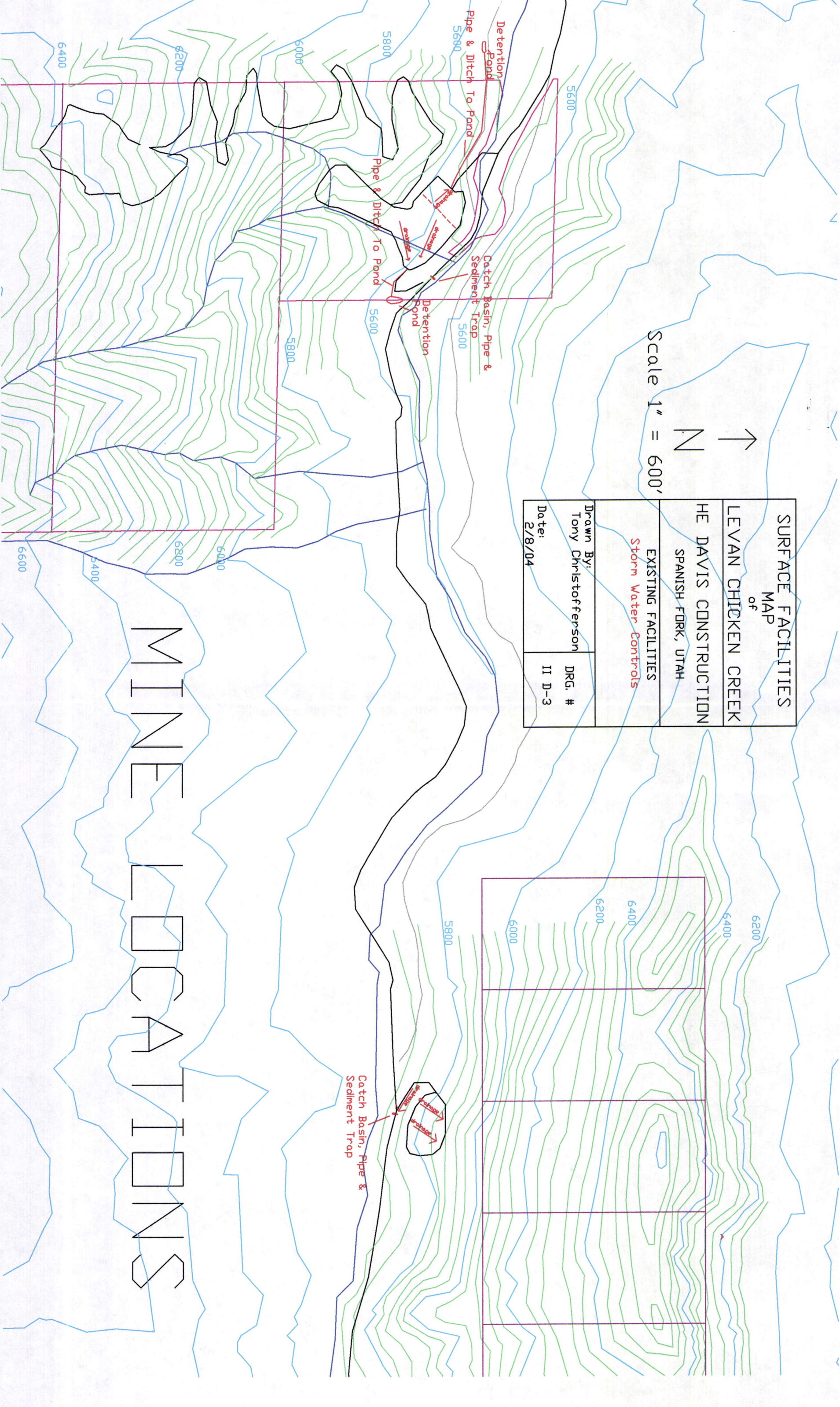




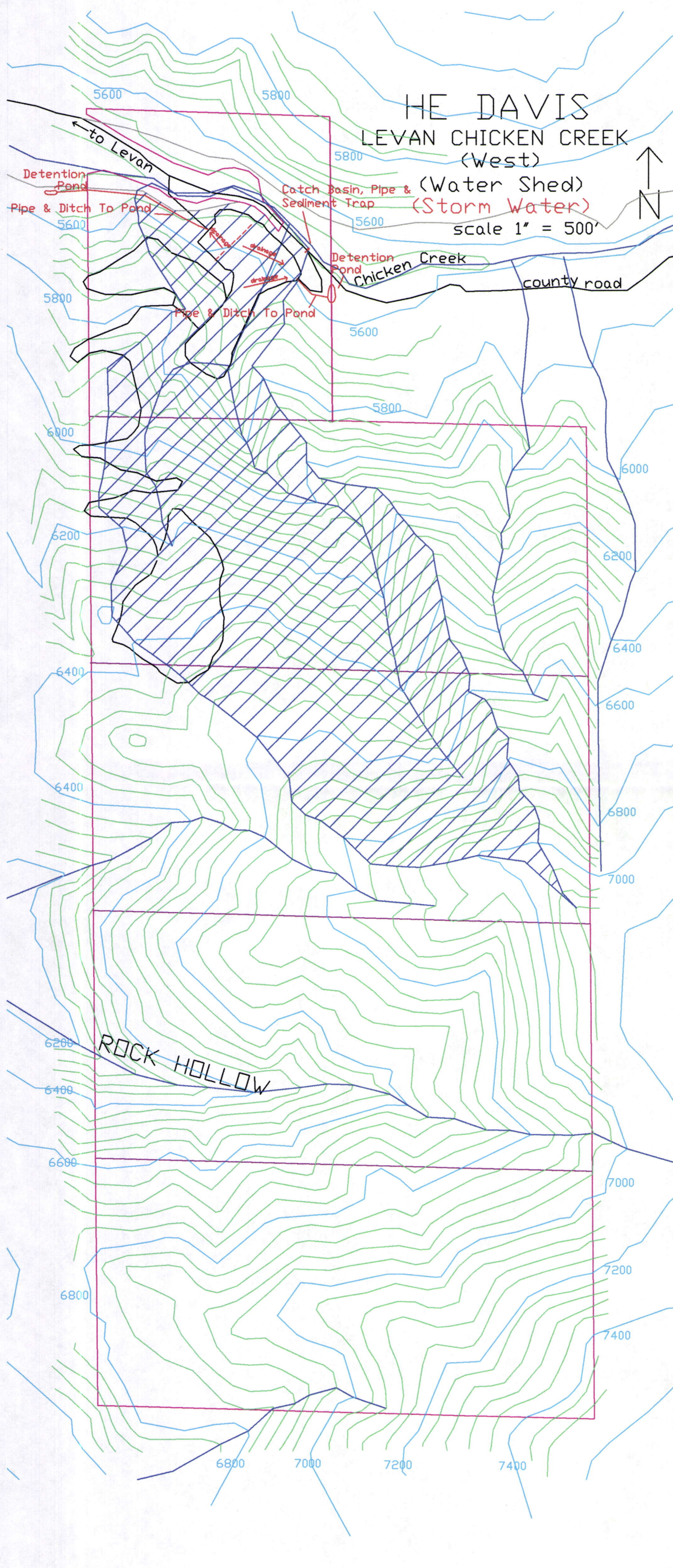
Scale 1" = 600'

SURFACE FACILITIES MAP of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
EXISTING FACILITIES Storm Water Controls	
Drawn By: Tony Christofferson	DRG. # II D-3
Date: 2/8/04	

# MINE LOCATIONS







WATER SHED MAP STORM WATER CONTR. of LEVAN CHICKEN CREEK	
HE DAVIS CONSTRUCTION SPANISH FORK, UTAH	
Water Shed Strom Water Contralls	
Drawn By: Tony Christofferson	DRG. #
Date: 2/8/04	II D-4



HE DAVIS  
LEVAN CHICKEN CREEK  
(West)

(Water Shed)

(Storm Water)

scale 1" = 200'



WATER SHED MAP  
STORM WATER CONTR.  
of  
LEVAN CHICKEN CREEK

HE DAVIS CONSTRUCTION  
SPANISH FORK, UTAH

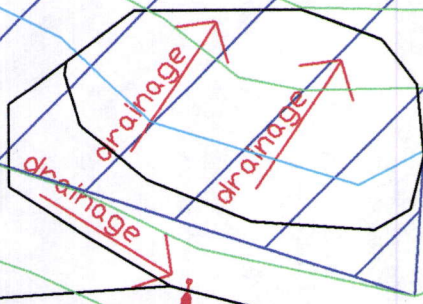
Water Shed  
Storm Water Controls

Drawn By:  
Tony Christofferson

DRG. #

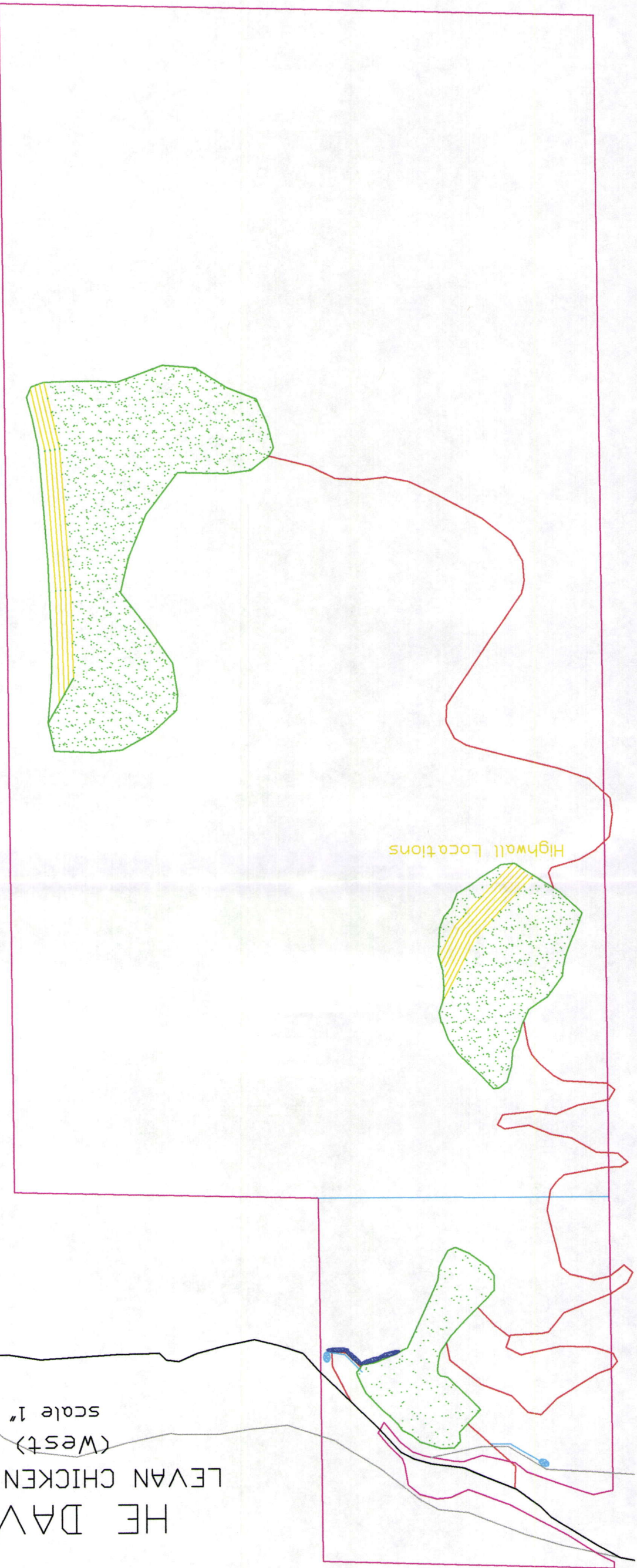
II D-5

Date: 2/8/04



Catch Basin, Pipe &  
Sediment Trap





PROPOSED AREAS  
OF RECLAMATION  
AREA WILL RECEIVE  
5" OF SOIL AND THEN  
BE SEEDED

ROADS TO BE RECLAIMED

HIGHWALL TO REMAIN

STORM WATER SYSTEM  
TO BE RECLAIMED

DISTURBED DRAINAGE TO  
BE RECLAIMED



This page is a reference page used to track documents internally for the Division of Oil, Gas and Mining

Mine Permit Number M0230016 Mine Name Lewan Gypsum  
Operator Geneva Rock Date 2-10-2004  
TO \_\_\_\_\_ FROM \_\_\_\_\_

☐ CONFIDENTIAL ☐ BOND CLOSURE ☐ LARGE MAPS ☒ EXPANDABLE  
☐ MULTIPUL DOCUMENT TRACKING SHEET ☐ NEW APPROVED NOI  
☐ AMENDMENT ☐ OTHER \_\_\_\_\_

Description YEAR-Record Number

☐ NOI ☒ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

Third Review of the Amened NOI

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ NOI ☐ Incoming ☐ Outgoing ☐ Internal ☐ Superceded

☐ TEXT/ 8 1/2 X 11 MAP PAGES ☐ 11 X 17 MAPS ☐ LARGE MAP

COMMENTS: \_\_\_\_\_

CC: \_\_\_\_\_